IN THE SPECIFICATION

Please amend the title of the specification as follows:

"POWER SOURCE SWITCHING UNIT WITH INTEGRATED CHARGING CIRCUIT FOR SELECTIVELY COUPLING AN EXTERNAL POWER SOURCE, A COMPUTER LOAD, AND BATTERIES, FOR PROVIDING TEMPORARY POWER DURING COUPLING, AND FOR CHARGING BATTERIES"

IN THE CLAIMS

Please amend the claims as follows:

Cancel claims 8-12. Add claims 13-26

Amend claims 1-7 as set forth below:

1. (currently amended) A power source switching unit with an integrated charging circuit for ~~supplying~~ selectively coupling ~~electric power to~~ an external power source, a computer loads ~~by an external power source~~ and ~~a plurality~~ one or ~~of~~ more batteries, for providing temporary power during coupling, and for charging the one or more batteries, comprising:

an external power ~~circuit~~ receiving unit to ~~supply~~transfer electric power from ~~the~~ an external power source to ~~the~~ a power output to which a computer loads is coupled;

a detector, directly coupled to the power output of the external power receiving unit, to measure the voltage supplied by the external power receiving unit and detect a loss of the electric power supplied from the external power ~~circuit~~source to the external power receiving unit, wherein said detector detects the loss of the electric power supplied from the external power source to the external power receiving unit by measuring the voltage level supplied by the power output and comparing the voltage level to a fixed reference voltage, regardless of whether power is being supplied by the one or more batteries;

~~a plurality of~~one or more battery power supply circuits to ~~supply electric power from the~~ selectively couple ~~plurality of~~ one or more batteries to the computer loads and the one more batteries to an integrated charging device;

~~a~~ the integrated charging device, coupled to the power output and to the one or more battery supply circuits, wherein the charging device is capable of selectively trickle charging and rapid charging ~~to charge at least one of~~ the ~~plurality of~~ one or more batteries with the electric power supplied from the ~~external~~ power ~~circuit~~ output;

a ~~switching device~~control unit ~~to switch the battery power supply circuit to supply~~ to selectively cause the one or more battery supply circuits to couple the one or more batteries to the integrated charging unit during periods when the external power receiving unit is receiving electric power and to cause the one or more battery supply circuits to couple the one or more batteries to the computer load ~~electric power from at least one of the plurality of battery power supply circuits to the computer loads~~ within a predetermined time in response to ~~the~~ detector detecting a loss of the electric power supplied from the external power circuit, ~~while the charging device is charging the at least one of the plurality of batteries and also supplying electric power from the external power source to the computer loads~~; and

a rechargeable temporary power supply device to supply electric power to the computer loads ~~only~~ for at least the predetermined time in response to ~~the~~ the detector detecting the loss of the electric power supplied from the external power circuit.

2. (currently amended) The power source switching unit ~~according to~~ of claim 1, ~~further comprising a plurality of switches respectively connected to the plurality of~~ wherein the rechargeable temporary power supply device further comprises a capacitor coupled to the power output and the computer load ~~battery power supply circuits, wherein electric power is supplied to computer loads by switching on the switch when a battery corresponding to the battery power supply circuit is charged~~.

3. (currently amended) The power source switching unit ~~according to~~ of claim 1, ~~further comprising a plurality of switches respectively connected to the plurality of battery power supply circuits~~, wherein the external ~~electric~~ power receiving unit is ~~supplied to computer loads when electric power is supplied from the corresponding battery~~ removably coupled to the computer loads.

4. (currently amended) The power source switching unit ~~according to~~ of claim 1, ~~further comprising a plurality of switches respectively connected to the plurality of~~wherein the rechargeable temporary power device further comprises a rechargeable battery ~~power supply circuits, wherein electric power is supplied to computer loads by switching on at least one of the plurality of switches which corresponds to a battery capable of supplying electric power within the predetermined time when responding to the detector~~.

5. (currently amended) The power source switching unit ~~according to~~ of Claim 1, ~~further comprising a plurality of switches respectively connected to the plurality of battery power supply circuits,~~ wherein the external ~~electric~~ power receiving unit is supplied ~~to computer loads by switching on the switch when a battery corresponding to the battery power supply circuit is~~ with alternating current electric power and ~~charged~~ discharges direct current electric power through the power output.

6. (currently amended) The power source switching unit ~~according to~~ of Claim 1, further comprising a ~~plurality of~~ switching ~~es~~ unit ~~respectively connected~~ coupled to the power output and to one or more of ~~to~~ the ~~plurality of~~ battery-power supply circuits, ~~wherein electric power is supplied to computer loads when electric power is supplied from the corresponding battery to the computer loads~~wherein the switching unit prevents a short circuit of the integrated charging device while the integrated charging device is charging one or more of the batteries.

7. (currently amended) The power source switching unit ~~according to~~ of Claim 1, further comprising ~~a plurality of switches respectively connected to the plurality of battery power supply circuits, wherein electric power is supplied to computer loads by switching on all of the plurality of switches within the predetermined time when responding to the detector~~ a direct current to direct current voltage converter coupled between the power output and the computer load.

8.-12. (Canceled)

13. (new) A method of using a power source switching unit with an integrated charging circuit to selectively couple an external power source, a computer and one or more batteries, to provide temporary power during coupling, and to charge the one or more batteries, comprising:

an external power receiving unit transferring electric power from an external power source to a power output to which a computer load is coupled;

a detector, directly coupled to the power output of the external power receiving unit, measuring the voltage supplied by the external power receiving unit and detecting a loss of the electric power supplied from the external power source to the external power receiving unit, wherein said detector detects the loss of the electric power supplied from the external power source to the external power receiving unit by measuring the voltage level supplied by the power output and comparing the voltage level to a fixed reference voltage, regardless of whether power is being supplied by the one or more batteries;

one or more battery power supply circuits selectively coupling one or more batteries to the computer load and the one more batteries to an integrated charging device;

the integrated charging device, coupled to the power output and to the one or more battery supply circuits, selectively trickle charging and rapid charging the one or more batteries with the electric power supplied from the power output;

a control unit selectively causing the one or more battery supply circuits to couple the one or more batteries to the integrated charging unit during periods when the external power receiving unit is receiving electric power and causing the one or more battery supply circuits to couple the one or more batteries to the computer load within a predetermined time in response to the detector detecting a loss of the electric power supplied from the external power circuit, and

a rechargeable temporary power supply device supplying electric power to the computer load for at least the predetermined time in response to the detector detecting the loss of the electric power supplied from the external power circuit.

14. (new) The method of claim 13, wherein the supplying step further comprises a capacitor coupled to the power output and the computer load supplying electric power to the computer load.

15. (new) The method of claim 13, further comprising removably coupling the external power receiving unit to the computer load.

16. (new) The method of claim 13, wherein the supplying step further comprises a rechargeable battery coupled to the power output and the computer load supplying electric power to the computer load.

17. (new) The method of Claim 13, wherein the transferring step further comprises an external power receiving unit receiving alternating current electric power and discharging direct current electric power through the power output.

18. (new) The method of Claim 13, further comprising a switching unit coupled to the power output and to one or more of the battery power supply circuits preventing a short circuit of the integrated charging device while the integrated charging device is charging one or more of the batteries.

19. (new) The method of Claim 13, further comprising a high-voltage direct current to low-voltage direct current voltage converter, coupled between the power output and the computer load, converting voltage.

20. (new) A data processing system including a power source switching unit with an integrated charging circuit for selectively coupling an external power source, a computer load and one or more batteries, for providing temporary power during coupling, and for charging the one or more batteries, comprising:

an external power receiving unit to transfer electric power from an external power source to a power output to which a computer load is coupled;

a detector, directly coupled to the power output of the external power receiving unit, to measure the voltage supplied by the external power receiving unit and to detect a loss of the electric power supplied from the external power source to the external power receiving unit, wherein said detector detects the loss of the electric power supplied from the external power source to the external power receiving unit by measuring the voltage level supplied by the power output and comparing the voltage level to a fixed reference voltage, regardless of whether power is being supplied by the one or more batteries;

one or more battery power supply circuits to selectively couple one or more batteries to the computer load and the one more batteries to an integrated charging device;

the integrated charging device, coupled to the power output and to the one or more battery supply circuits, wherein the charging device is capable of selectively trickle charging and rapid charging the one or more batteries with the electric power supplied from the power output;

a control unit to selectively cause the one or more battery supply circuits to couple the one or more batteries to the integrated charging unit during periods when the external power receiving unit is receiving electric power and to cause the one or more battery supply circuits to couple the one or more batteries to the computer load within a predetermined time in response to detector detecting a loss of the electric power supplied from the external power circuit, and

a rechargeable temporary power supply device to supply electric power to the computer load for at least the predetermined time in response to the detector detecting the loss of the electric power supplied from the external power circuit.

21. (new) The data processing system of claim 20, wherein the rechargeable temporary power supply device further comprises a capacitor coupled to the power output and the computer load.

22. (new) The data processing system of claim 20, wherein the external power receiving unit is removably coupled to the computer load.

23. (new) The data processing system of claim 20, wherein the rechargeable temporary power device further comprises a rechargeable battery.

24. (new) The data processing system of Claim 20, wherein the external power receiving unit is supplied with alternating current electric power and discharges direct current electric power through the power output.

25. (new) The data processing system of Claim 20, further comprising a switching unit coupled to the power output and to one or more of the battery power supply circuits, wherein the switching unit prevents a short circuit of the integrated charging device while the integrated charging device is charging one or more of the batteries.

26. (new) The data processing system of Claim 20, further comprising a direct current to direct current voltage converter coupled between the power output and the computer load.